DOCUMENT RESUME

ED 285 155 CS 210 504

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TITLE The Effect of Role Playing on the Written Persuasion of Fourth and Eighth Graders.
PUB DATE [87]
NOTE 52p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Comparative Analysis; Elementary Education; Grade 4; Grade 8; Interpersonal Communication; *Letters (Correspondence); *Persuasive Discourse; *Role Playing; Teaching Methods; *Writing Instruction; Writing Research; Writing Skills
IDENTIFIERS Audience Awareness; Author Text Relationship; Collaborative Learning; *Writing Strategies

ABSTRACT

A study examined the effect of role playing on persuasive letters written by 84 fourth and 70 eighth graders. Role playing was defined as improvised, unrehearsed oral interaction in a simulated context. Randomly selected students from 11 comparable heterogeneous classes in a middle-class suburb wrote to their school principals on three different topics in one of three instructional conditions: role playing (in pairs) prior to writing, direct instruction prior to writing, and no instruction. The effect of each instructional condition was assessed by scoring the 462 persuasive letters independently. Findings showed that for persuasive writing, role playing in partners was significantly more effective for fourth graders than was a lecture and examples, and, for eighth graders, significantly more effective than no instruction. Findings also showed that eighth graders significantly outperformed fourth graders, and girls significantly outperformed boys at fourth grade level but not at eighth grade level. Overall, role playing was more effective for fourth graders than for eighth graders. (Eight tables of data and several figures are included, and references are appended.) (NKA)

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THE EFFECT OF ROLE PLAYING ON THE WRITTEN PERSUASION OF FOURTH AND EIGHTH GRADERS

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THE EFFECT OF ROLE PLAYING ON THE WRITTEN PERSUASION OF FOURTH AND EIGHTH GRADERS

Abstract. This study examined the effect of role playing on persuasive letters written by 84 fourth and 70 eighth graders. Comparable students wrote to their school principals on three different topics in one of three instructional conditions: role playing prior to writing, direct instruction prior to writing, and no instruction. The effects were assessed using a counterbalanced quasi-experimental 4-way randomized groups design scoring writing samples for Highest Target Orientation Level, Variety of Levels of Target Orientation, and Number of Persuasive Assertions. Findings show: for persuasive writing, role playing in partners is significantly more effective, for fourth graders, than a lecture and examples, and, for eighth graders, significantly more effective than no instruction. Eighth graders significantly outperform fourth graders, and girls significantly outperform boys at fourth but not at eighth grade. Topic has a significant effect.

The relationship of oral to written language has long been of interest to the profession of writing teachers. Not only is oral language commonly viewed as a seedbed for the development of writing, but drama has long been advocated as a way to develop the language facility needed for writing (Britton, 1970; Britton, Burgess, Martin, McLeod, & Rosen, 1979; Heathcote, 1981; Moffett & Wagner, 1983; Plowden, 1967; Wagner, 1985). However, empirical confirmation is weak. Except for studies of dramatic play in kindergarten and primary classrooms, there is only one that measures the effect of role playing on persuasive writing. It is Troyka's (1973) study of remedial college students, which shows that role playing improves writing.

The purpose of my study was to determine the effect of role playing on the persuasive letter writing of fourth and eighth graders. Role playing is defined here as improvised, unrehearsed oral interaction in a simulated context. In this case, the oral interaction was produced by students working in pairs in an imagined situation in which one partner assumed the role of a student and the other the role of the school principal. The student in role was to persuade the other to change his or her mind about something. All of the pairs of students role-played simultaneously without any direct teacher intervention. The effect of this role playing on the persuasive letters written afterwards was compared with the effect of 1) a lecture and presentation of models and rules of good persuasion and 2) no instruction.

I focused on persuasion in part because the findings of several studies show persuasion to be significantly harder to produce than other types of discourse (Crowhurst, 1980, 1983; Fowler, 1981; Fowler & Glynn, 1983; Freedman & Pringle, 1979; Hidi & Hildyard, 1983; Matsuhashi, 1982, in press). These findings are consistent with claims of Britton et al.(1975), Harpin (1976), and Moffett and Wagner (1983). It seems ironic that written persuasion is more difficult to produce than other aims of discourse since the persuasive function of oral language is one even toddlers try.

The quality of student persuasive writing seems to have declined since 1973. The National Assessment of Educational Progress of the writing of thirteen-year-olds showed a decline in the percentage of students writing a successful persuasive letter (Mullis, 1985, p.1). Although 69% were able to do a marginal job in 1973, the proportion dropped to 64% in 1978, and 14% in 1984. During this same period when persuasive writing sharply declined in quality, descriptive, expressive, and informative writing of thirteen-year-olds showed little change.

METHOD

Three persuasive letters written by each of 84 fourth and 70 eighth graders in response to three different writing prompts provided the data for this study. An equal number of boys and girls at each grade level were selected at random from 11 comparable heterogeneous classes in a school district in a middle-class suburb changing from a predominantly Jewish to a mixed population, including 25% Asian.

Procedure

Students wrote persuasive letters to their school principals on three different topics in one of three 35-minute instructional conditions: role playing prior to writing, direct instruction prior to writing, and no instruction. The direct-instruction condition was introduced to avoid confounding the results with

the effect of time on task. To control for teacher effect, I conducted both instruction sessions and administered all of the writing tasks.

In the experimental condition, students role played with a partner and then wrote on the same topic after a break of between 10 and 15 minutes for the fourth graders, or until the same class period the next day for the eighth graders. Each student in the role-playing experimental condition role played twice, taking a turn as the persuader for about 10 minutes and as the target for the persuasion for about 10 minutes; the same topic was used, but the partners changed roles. All the class members engaged in the role playing at the same time. For the role playing, I paired the students with a partner of the same sex, since most observers of children of these ages suggest children feel freer to communicate if they are not talking across gender lines (Mitchell, pp.58-59).

In the direct-instruction condition, students read together, discussed, and analyzed typed copies of two models of good persuasion, one on a different topic and one on a topic similar to the one on which they were to write subsequently. One example was from a speech of a trial lawyer and the other, a letter to a principal. I went over a list of eight rules of good persuasion and showed how the models reflected these rules.

Five minutes before the end of the period, I passed out amd then collected again the topic for the subsequent writing task and asked the students to think about what they would say when they wrote their persuasive letters (later the same day for the fourth graders; the next day for the eighth graders).

In the no-instruction condition, students saw the assigned topic for the first time right before they wrote. All three writing sessions were conducted in the same way. I gave production signals, or simple promptings to write as much as possible; these were adapted from those Scardamalia, Bereiter, and Goelman (1982, p.192). Their goal, like mine, was to discourage the brevity that is common in children's essays.

The Target Orientation Level was determined by a scale adapted from one developed by Delia, Kline, and Burleson (1979). In traditional rhetorical theory, one of the major elements that accounts for effectiveness in successful persuasive discourse is a sensitive awareness of, or empathy with, the needs and desires of an audience, or at least an imagined identification with this audience. This insight, whether or not the persuader is conscious of it, enables him to generate the types of appeal that are likely to influence his target to believe or do what he intends. I assumed that Target Orientation measured this sensitivity to audience.

The effect of each instructional condition was assessed using a counterbalanced quasi-experimental 4-way randomized groups design. The data were analyzed by ANOVAS and post-hoc Newman-Keuls tests.

Writing Topics

Because the quality of writing varies depending on the assigned topic or writing task (Kinzer & Murphy, 1983), as does the level of persuasive strategy reflecting target orientation (Clark & Delia, 1976), I chose three topics that were as similar as possible to promote greater reliability of the testing instrument. All three called for a persuasive letter on a subject on which the students had some familiarity and in the same setting, the school; all were addressed to the principal.

The first topic was to argue that students their age be allowed to select their own subjects in school; the second, to argue for a school-sponsored party once a month; and the third, to argue for a change in the school cafeteria.

Scale for Level of Target Orientation

The 462 persuasive letters were scored independently by two scorers on a 7-point scale for: Highest Target Orientation Level and Variety of Levels of Target Orientation; they were also scored for the total Number of Persuasive Assertions. The Pearson inter-rater reliability of the two scorers was r = .82 on Highest

Level, r = .78 on Variety of Levels, and r = .92 on Persuasive Assertions ($p<.001$ [Cohen's k] for all three measures).

Each level on the scale below represents a greater adaptation to the perspective of the principal.[1]

I. NO DISCERNIBLE RECOGNITION OF AND ADAPTATION TO THE TARGET'S PERSPECTIVE

Utterance that is not a desire or request, not a reason or support for request, nor an attempt to put the principal in a receptive mood
- a. Opening
- b. Introductory or transitional utterances
- c. Closing that is not a repetition

1 Unelaborated request or statement of personal desire or need, including pleas or begging; if the only time it appears is in a sentence with a reason, it should be marked as a Level 1 Assertion so the paper is distinguished from the one that has no Persuasive Assertion at this level
- a. Question used as an indirect request
- b. Simple statement of desire used as an indirect request
- c. Plea
- d. Wrap-up conclusion and request

II. IMPLICIT RECOGNITION OF AND ADAPTATION TO THE TARGET'S PERSPECTIVE

2 A reason for the request, showing only how it is necessary, desirable, or useful for the persuader (demonstrating an awareness that the principal needs a reason; simple recognition of the social convention of politeness)
- a. Elaboration of the problem
- b. Elaboration of persuader's need
- c. Elaboration of how persuader would like to see the request granted, but with no implied awareness of the target's perspective
- d. Egocentric justification of reason

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1. To avoid confusion or the cumbersomeness of the phrase he or she, on this scale I am using the pronoun she to refer to both sexes.

e. Recognition of effect of politeness

3 Elaboration of persuader's or persuasive target's need plus minimal dealing with anticipated counter-arguments; reasons for the request that imply some awareness of the questions that would come to the principal's mind or concerns she would have
   a. Implied recognition that the principal may not automatically be interested in the request
   b. Implied refutation of anticipated counterargument
   c. Elaboration of need from the perspective of an involved party other than the persuader or principal
   d. Appeal to general principles or mutual values, but implied rather than explicit
   e. Acknowledgment that counterargument has merit, but the persuader disagrees with it
   f. Example of analogous case or facts to support request
   g. Strategy for implementation that may show no awareness of the principal's perspective
   h. Minimal anticipation of principal's counterargument

III. EXPLICIT RECOGNITION OF AND ADAPTATION TO THE TARGET'S PERSPECTIVE

4 Obvious but truncated effort to show relevant consequences to the principal of accepting (or rejecting) the persuasive request; an effort that reveals awareness of the principal's perspective and problems
   a. Explicit attempt to identify with the target's situation or the values shared by the persuader and the target -- to "soften him or her up"
   b. Recognition of consequences of granting or failing to grant the request
   c. Unelaborated statement of advantage to principal
   d. Effective bribes or "sensible" threats
   e. Effective rhetorical questions

5 Elaboration of the consequences of complying (or not complying) with the persuasive request; or elaboration of specific ways to implement the request that would mitigate a problem a principal would consider important
   a. Ways to solve a logistical problem
   b. Ways to involve target in solving a logistical problem
   c. Ways to avoid a problem created by the proposal

6 Explicit attempts by the persuader to take the target's perspective in articulating an advantage to the target, or proposal of a genuine compromise
   a. Advantage to the target
   b. Proposal of a genuine compromise, so both parties have something to gain

Scoring

The scorers distinguished each discrete Persuasive Assertion on the writing samples and assigned it a number from 0 to 6, using the Scale for Level of Target Orientation which had examples for each subcategory. Any Assertion that clearly met the guidelines on the Scale for Level of Target Orientation, was assigned its appropriate number even though that level was not consistent with adjacent units or with the general level of the piece. The illustrative types of assertions (a to h) under each of the headings were used as guiding examples. Utterances that were neither requests, nor reasons for requests, nor elaborations of these reasons, nor attempts to put the principal in a receptive mood were scored 0. The only other scores used were R and ER. An R was assigned to an ineffective repetition, one that simply repeated in approximately the same words a previous Assertion. A repetition judged to be rhetorically effective was scored ER for effective repetition. The highest number of any Persuasive Assertion was recorded as the first score of three scores on each discourse sample, a score for the dependent variable, Highest Target Orientation Level. Neither of the scorers was aware of the scores the other one had assigned until after I determined inter-rater reliability.

The assumption underlying this scoring system is that although it is obvious students will differ in the highest level

they exhibit, any given paper, including the best paper, will probably show a range of levels of target orientation. A student capable of using a high-level strategy may choose to use a lower one, but a student who is not yet capable of a higher-level strategy will not produce one. Thus, failure to use a strategy reflecting a higher-level of target orientation cannot definitively be interpreted as lack of skill. The student may simply have chosen not to use a high-level strategy. My scale tests performance, not competence. The model for this type of categorization has been developed by psychologists to measure ego development; Kohlberg set up stages of moral development and Perry of intellectual and ethical development (Blasi, 1976).

The second score on each student sample is a measure of the Variety of Levels of Target Orientation. To determine this, the scorers counted the number of different levels of Assertions, which they had recorded in the margins of the papers. The scores ranged from 1 to 6 on any one discourse sample. For example, if a student used only unelaborated statements of personal desire or need (Level 1 on the scale above) and reasons that show only how it is necessary, desirable, or useful for the persuader (Level 2), her score is 2. In other words, Persuasive Assertions were considered different only if they represented different categories, from 1 through 6 on the scale.

To determine what was a Persuasive Assertion, I set up a system for parsing the texts that was as descriptive (as opposed to evaluative) as possible. The persuasive unit used here is a semantic, not a linguistic, one: the smallest discrete persuasive unit that cannot be subdivided into two separate units without altering its meaning. This parsing scheme follows the system Delia et al.(1979) used and is similar to one Scardamalia, Bereiter, and Goelman (1982) employed, having scorers segment discourse samples into units that could function as requests or reasons. A Persuasive Assertion is a request, reason for a request, or an attempt to put the principal in a receptive mood. It may be a part of a sentence (usually one clause in a compound sentence), a whole sentence, or what if punctuated conventionally would be a complex sentence. The only exception is the request and reason that appears in a letter that has no other request at Level 1 on my scale. In that case, it is scored as two Persuasive Assertions, so the student gets credit for having a Level 1 Assertion (a request) when the Variety of Levels of Target Orientation is tallied. In all other cases, if a complex sentence consists of a single request and a single reason, that sentence is scored as one Persuasive Assertion. If, however, any complex sentence contains words, phrases, or clauses that constitute more than one reason, each is scored as a separate Persuasive Assertion.

The quality of a reason is not evaluated; if it is not a particularly convincing reason, it is still counted. As long as the student has generated a reason he might conceivably consider to be a possible persuasive request, reason, or attempt to get the principal in a receptive or cooperative mood, it is considered a Persuasive Assertion. If not, it is scored with a 0 as a nonfunctional unit.

The third score for each persuasive letter is a tally of the total Number of Persuasive Assertions (appeals, reasons, and attempts to identify with, praise, or soften up the principal). The two types of units that are not included as Persuasive Assertions are those that are neither requests nor reasons, scored as 0, and ineffective repetitions, scored as R. Each separate Assertion was counted, even if it were an Assertion at the same level as one of the subcategories in the Scale for Level of Target Orientation, or if it were recorded as an effective repetition (ER).

RESULTS

I analyzed variance with three modes of instruction, two grade levels, three topics, and sex as independent variables. Then I re-analyzed variance with the covariate of number of words to see how much of the variance was a function of length. The three dependent measures I used are: Highest Target Orientation Level, Variety of Levels of Target Orientation, and total Number of

Persuasive Assertions. I compared the three scores on each of the three writing samples of the 154 subjects in each of the instructional conditions, at both grade levels, for each of the three topics for persuasion, and for both sexes.

Here is a report the main effects, interactions, post-hoc analyses of variance, and Newman-Keuls tests. I established an alpha level of $p<.05$ as the level of statistical significance for the analysis of variance (ANOVA) and the Newman-Keuls test. I used the Statistical Package in the Social Sciences (SPSS), which controls for unequal n's, to determine the ANOVAS.

A four-way analysis of variance (ANOVA) shows that not only mode of instruction and grade level, but also topic and sex, have significant main effects on all three dependent variables: Highest Target Orientation Level, Variety of Levels of Target Orientation, and Number of Persuasive Assertions. When corrected for length, sex is no longer significant on any of the measures; and, on the Persuasive Assertions measure, neither is instruction or grade level.

Highest Target Orientation Level

For the Highest Target Orientation Level, an analysis of variance shows a main effect for grade level ($F_{1,426} = 75.440$, $p<.001$), with eighth graders performing at a significantly higher level than fourth ($M_8 = 4.53$, $M_4 = 3.77$). Mode of instruction shows a

main effect ($F_{2,426}$ = 15.426, p<.001), with role playing (rp) significantly more effective than either direct instruction (di) or no instruction (ni) (M_{di} = 3.95, M_{ni}, M_{rp} = 4.43 = 3.96). On the Newman-Keuls post-hoc test, the difference between the performance in the role-playing condition and the other two instructional conditions is at the p<.01 level of significance, but there is no significant difference between the direct-instruction and no-instruction conditions. See Table 1 and 3 below.

Topic also has a significant main effect for the Highest Target Orientation Level ($F_{2,426}$ = 7.813, p<.001), with the best performance on the party topic 2 (M_2 = 4.30), the second best on choosing of subjects topic 1 (M_1 = 4.13), and the last on change in the cafeteria topic 3 (M_3 = 3.90). The Newman-Keuls test shows a significant difference (p<.01) between cafeteria topic 3 and the other two topics but no significant difference between topics 1 and 2. See Table 4 below. Finally, the effect for sex is significant ($F_{1,426}$ = 4.597, p<.033), with girls scoring significantly higher than boys (M_g = 4.21 [SD* = 1.01], M_b = 4.02 [SD = 1.08]). (SD stand for Standard Deviation.)

Because there is a significant Pearson correlation between the number of words in each student letter and the Highest Target Orientation Level score (r = .50, p<.001), I did another ANOVA with the covariate of total number of words: sex no longer has a

main effect, but the other three independent variables do at the $p<.001$ level. There is a main effect for grade level ($F_{1,425}$ = 12.988; M_8 = 4.30, M_4 = 3.96); for mode of instruction ($F_{2,425}$ = 10.925; M_{ni} = 4.00, M_{di} = 3.96, M_{rp} = 4.38); and for topic ($F_{2,425}$ = 6.759; M_1 = 4.12, M_2 = 4.30, M_3 = 3.93). The effect of instruction and grade level is slightly less when the covariate of length is included. However, role playing is still significantly more effective (Newman-Keuls, $p<.01$) in improving writing than direct instruction and than no instruction. When corrected for length, there is a significant difference between the cafeteria topic 3 and the party topic 2 (Newman-Keuls, $p<.01$) and between topic 2 and the choosing subjects topic 1 (Newman-Keuls, $p<.05$).

There are two significant interactions that affect Highest Target Orientation Level: between mode of instruction and topic, and between grade level and mode of instruction. The interaction between mode of instruction and topic significantly affects all three dependent variables. The effect of this interaction is at the $p<.016$ level ($F_{4,426}$ = 3.069) for the Highest Target Orientation Level. See Figure 1 and also Table 1 below for the means and standard deviations.

The only other interaction that affects the measure of Highest Target Orientation Level is between grade level and mode of instruction; this interaction is at the $p<.04$ probability

level ($F_{2,426}$ = 3.247). As shown on Figure 2 above and Table 2 below, the main effect for mode of instruction is largely due to the performance of the fourth graders.

Table 1
Interaction between Mode of Instruction and Topic
Means and Standard Deviations

			No Instruction	Direct Instruction	Role Playing	MAIN EFFECT TOPIC
For Highest Target Orientation Level						
N		Topic				
154	M	1	4.20	3.90	4.26	4.13
	(SD)		(1.06)	(1.05)	(.94)	(1.02)
154	M	2	4.10	4.25	4.61	4.30
	(SD)		(.99)	(.89)	(.84)	(.93)
154	M	3	3.51	3.69	4.46	3.90
	(SD)		(1.09)	(1.18)	(.97)	(1.15)
MAIN EFFECT INSTRUCTION		M	3.96	3.95	4.43	
		(SD)	(1.08)	(1.07)	(.93)	
For Variety of Levels of Target Orientation						
N		Topic				
154	M	1	3.96	3.56	3.88	3.81
	(SD)		(1.02)	(1.00)	(.89)	(.98)
154	M	2	3.82	4.11	4.30	4.07
	(SD)		(.94)	(.96)	(.91)	(.95)
154	M	3	3.23	3.57	4.12	3.66
	(SD)		(1.01)	(1.13)	(1.04)	(1.12)
MAIN EFFECT INSTRUCTION		M	3.69	3.76	4.09	
		(SD)	(1.03)	(1.06)	(.96)	

Note. Standard deviations are in parentheses.

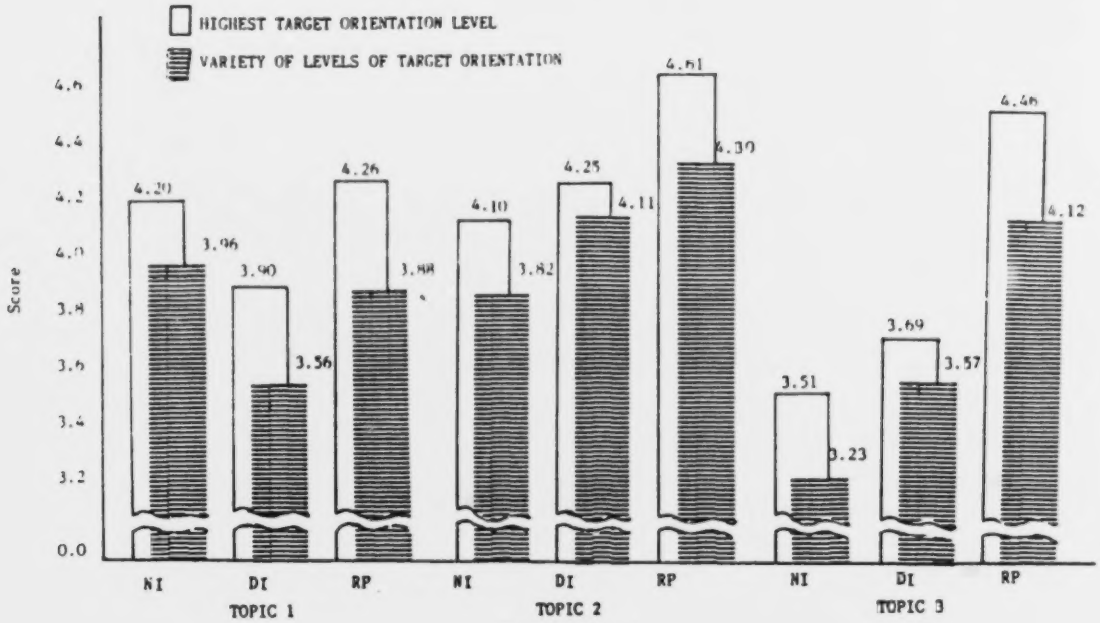

FIGURE 1

EFFECT OF MODE OF INSTRUCTION FOR EACH TOPIC ON HIGHEST LEVEL AND VARIETY OF LEVELS OF TARGET ORIENTATION

Note. NI = No Instruction DI = Direct Instruction RP = Role Playing

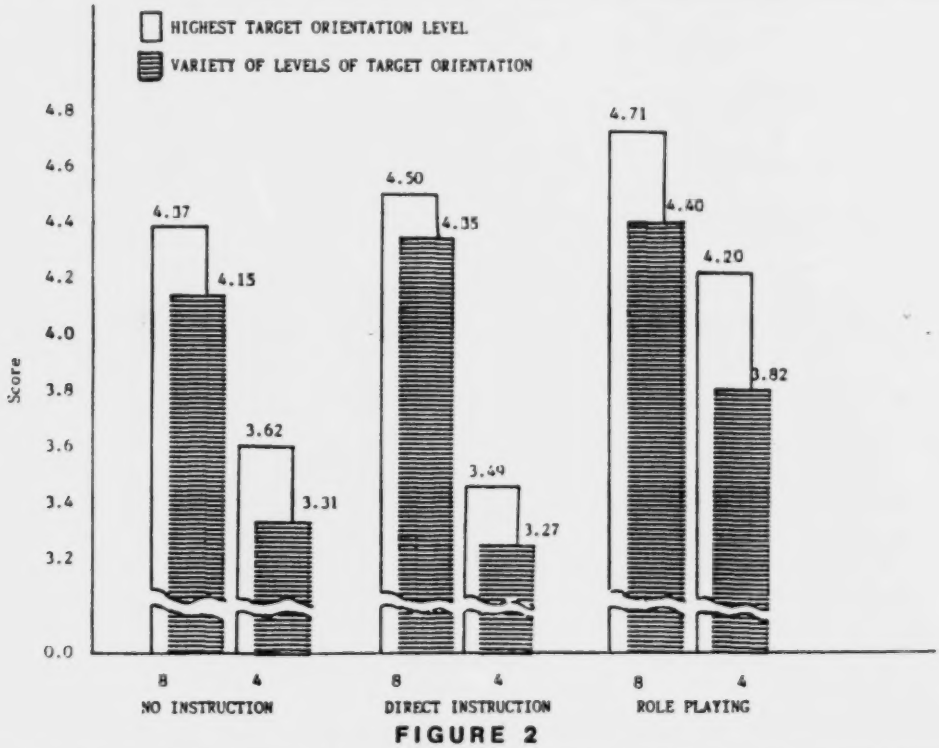

FIGURE 2

EFFECT OF GRADE LEVEL AND MODE OF INSTRUCTION ON HIGHEST LEVEL AND VARIETY OF LEVELS OF TARGET ORIENTATION

Note. 8 = 8th Grade 4 = 4th Grade

Table 2
Interaction between Mode of Instruction and Grade Level
Means and Standard Deviations

			No Instruction	Direct Instruction	Role Playing	MAIN EFFECT GRADE
For Highest Target Orientation Level						
N		Grade				
252	M	4	3.62	3.49	4.20	3.77
	(SD)		(1.03)	(.98)	(.91)	(.97)
210	M	8	4.37	4.50	4.71	4.53
	(SD)		(.99)	(.89)	(.87)	(.92)
MAIN EFFECT INSTRUCTION	M		3.96	3.95	4.43	
	(SD)		(1.08)	(1.07)	(.93)	
For Variety of Levels of Target Orientation						
N		Grade				
252	M	4	3.31	3.27	3.82	3.47
	(SD)		(.93)	(.95)	(.86)	(.94)
210	M	8	4.15	4.35	4.40	4.30
	(SD)		(.96)	(.86)	(.98)	(.94)
MAIN EFFECT INSTRUCTION	M		3.69	3.76	4.09	
	(SD)		(1.03)	(1.06)	(.96)	

Note. Standard deviations are in parentheses.

An ANOVA for each of the topics shows the following: instructional condition does not significantly affect topic 1 on the Highest Target Orientation Level measure. However, students on the "choosing subjects" topic 1 scored lower in the direct-instruction condition than in the no-instruction condition on all three dependent measures. For the "party" topic 2, an

ANOVA shows an effect at the $p<.02$ level ($F_{2,151} = 4.007$) and, for "cafeteria" topic 3, at the $p<.001$ level ($F_{2,151} = 12.397$).

For the Highest Target Orientation Level, the post-hoc test shows a significant difference between role playing and the other two modes of instruction for both the party topic 2 ($p<.05$, Newman-Keuls) and the cafeteria topic 3 ($p<.01$, Newman-Keuls), but there are no significant differences between the direct-instruction and no-instruction conditions. See Table 3 below and Figure 1 above.

Table 3
Pair Comparisons: Mode of Instruction by Topic

	Role Playing/ No Instruction RP - ni = Diff.	Role Playing/ Direct Instruction RP - DI = Diff.	Direct Instruction/ No Instruction DI - ni = Diff.
Means for Highest Target Orientation Level			
Topic 2	4.61 -4.10 = .51*	4.61 -4.25 = .36*	4.25 -4.10 = .15
3	4.46 -3.51 = .95**	4.46 -3.69 = .77**	3.69 -3.51 = .18
Diff. ON ALL 3 TOPICS	4.43 -3.96 = .47**	4.43 -3.95 = .48**	3.95 -3.96 =-.01
Means for Variety of Levels of Target Orientation			
Topic 2	4.30 -3.82 = .48*	4.30 -4.11 = .19	4.11 -3.82 = .29
3	4.12 -3.23 = .89**	4.12 -3.57 = .55**	3.57 -3.23 = .34
Diff. ON ALL 3 TOPICS	4.09 -3.69 =.40**	4.09 -3.76 = .33**	3.76 -3.69 = .07

Note. N for each topic in each mode of instruction = 154.

* p<.05 (Newman-Keuls)
** p<.01 (Newman-Keuls)

An ANOVA for each of the instructional conditions shows no significant difference between the topics in the role-playing condition. However, ANOVAS of the other two conditions show a significant difference between at least two of the three topics: in the no-instruction condition, at the $p<.003$ level ($F_{2,151} = 6.222$) and in the direct-instruction condition, at the $p<.02$ level ($F_{2,151} = 3.996$). In the direct-instruction condition,

performance is better on topic 2 than on either of the other topics, and significantly better than on topic 3 (at the $p<.05$ level, Newman-Keuls). In the no-instruction condition, there is a significant difference between topics 1 and 3 and between 2 and 3 ($p<.01$, Newman-Keuls). See Table 4 below and Figure 1 above.

Table 4
Pair Comparisons: Topic by Mode of Instruction

Topic	2 - 1 = Diff.	2 - 3 = Diff.	1 - 3 = Diff.
Means for Highest Target Orientation Level			
Instruction DI	4.25 - 3.90 = .35	4.25 - 3.69 = .56*	3.90 - 3.69 = .21
ni	4.10 - 4.20 =-.10	4.10 - 3.51 = .59**	4.20 - 3.51 = .69**
3 INSTR. MODES	4.30 - 4.13 = .17	4.30 - 3.90 = .40**	4.13 - 3.90 = .23**
Means for Variety of Levels of Target Orientation			
DI	4.11 - 3.56 = .55*	4.11 - 3.57 = .54**	3.56 - 3.57 =-.01
ni	3.82 - 3.96 =-.14	3.82 - 3.23 = .59**	3.96 - 3.23 = .73**
3 INSTR. MODES	4.07 - 3.81 = .26**	4.07 - 3.66 = .41**	3.81 - 3.66 = .15

Note. N for each topic in each mode of instruction = 154.

* $p<.05$ (Newman-Keuls)
** $p<.01$(Newman-Keuls)

To test the other interaction that affects the Highest Target Orientation Level, mode of instruction and grade level, I did an ANOVA at each grade. Instruction affects grade four more than

grade eight. At grade eight, the mode of instruction approaches significance in its effect $p<.057$ ($F_{2,192} = 2.895$); on the Newman-Keuls test, there is a significant difference ($p<.05$) between role playing and no instruction ($M_{rp} = 4.71$, $M_{ni} = 4.37$), but this could be due to increased time on task.

Instruction is significant at grade four on the Highest Level ($p<.001$, $F_{2,249} = 13.863$). As can be seen on Figure 2 and Table 2 above, direct instruction resulted at fourth grade in a worse score on both Highest Target Orientation Level and Variety of Levels measures than no instruction at all. It is the performance at this grade level that largely accounts for the main effects that are counter to my hypothesis that students would do better with direct instruction than with no instruction. At fourth grade, the Newman-Keuls test shows significance at the $p<.01$ level between role playing and the other two modes of instruction, but no significant difference between direct instruction and no instruction. See Table 5 below.

Table 5
Pair Comparisons: Mode of Instruction for Fourth Grade

Role Playing/ No Instruction	Role Playing/ Direct Instruction	Direct Instruction/ No Instruction
Means for Highest Target Orientation Level		
RP - ni = Diff.	RP - DI = Diff.	DI - ni = Diff.
Grade 4 4.20 - 3.62 =.58**	4.20 - 3.49 =.71**	3.49 - 3.62 =-.13
BOTH GRADES 4.43 - 3.96 =.47**	4.43 - 3.95 =.48**	3.95 - 3.96 =-.01
Means for Variety of Levels of Target Orientation		
Grade 4 3.82 - 3.31 =.51**	3.82 - 3.27 =.55**	3.27 - 3.31 =-.04
BOTH GRADES 4.09 - 3.69 =.40**	4.09 - 3.76 = .33**	3.76 - 3.69= -.07

** $p<.01$ (Newman-Keuls)

An ANOVA for each instructional condition shows that in all three modes of instruction, grade level differences are significant at the $p<.001$ level for the three dependent measures. For Highest Target Orientation Level, with no instruction, $F_{1,152} = 20.972$; with direct instruction, the F statistic is larger ($F_{1,152} = 44.024$), partly because the fourth graders did worse in this condition than in the other two, whereas the eighth graders did better than they did with no instruction, but not as well as with role playing ($F_{1,152} = 11.382$).

Grade level differences are significant for both girls and boys. Eighth-grade girls perform significantly better than fourth-grade girls, and eighth-grade boys do significantly better than fourth-grade boys, at the $p<.001$ level for both on all three dependent measures. For girls, $F_{1,229} = 30.231$ and for boys, $F_{1,229} = 37.311$ ($M_g = 4.21$, $M_b = 4.03$) for Highest Target Orientation Level.

An ANOVA at eighth grade shows no significant sex differences on any of the dependent measures, although girls have a slightly higher Highest Target Orientation Level ($M_g = 4.59$, $M_b = 4.47$). Fourth-grade girls also produce higher means ($M_g = 3.90$, $M_b = 3.66$), but an ANOVA shows no significance ($p<.063$, $F_{1,250} = 3.468$). Thus, the main effect of sex is due more to sex differences at fourth than at eighth grade.

When an ANOVA includes the covariate of number of words, the interaction between grade level and mode of instruction is no longer significant ($p<.088$, $F_{2,425} = 2.440$), nor is the interaction between instruction and topic. However, another interaction comes closer to significance, and that is between sex and instruction ($p<.099$, $F_{2,425} = 2.323$).

Variety of Levels of Target Orientation

The ANOVA for the dependent measure of Variety of Levels of Target Orientation shows grade level, sex, mode of instruction, and topic all have statistically significant main effects ($p<.001$), as they do for Highest Target Orientation Level. Eighth grade means again are significantly higher than fourth ($F_{1,426} = 98.193$; $M_8 = 4.30$, $M_4 = 3.47$). Girls write significantly better than boys ($F_{1,426} = 13.340$; $M_g = 4.00$, $M_b = 3.70$). Mode of instruction also affects Variety of Levels of Target Orientation ($F_{2,426} = 9.941$; $M_{rp} = 4.09$, $M_{di} = 3.76$, $M_{ni} = 3.69$). The difference between the performance in the role-playing condition and the other two instructional conditions is at the $p<.01$ level (Newman-Keuls), but there is no significant difference between the performance in the direct-instruction and no-instruction conditions. See Table 3 above.

Topic also exerts a main effect ($F_{2,426} = 8.801$), with the party topic 2 eliciting the greatest Variety of Levels ($M_2 = 4.07$), the choosing subjects topic 1 next ($M_1 = 3.81$), and the changes in the cafeteria topic 3 ($M_3 = 3.66$), third. This order of performance for topic is the same as that for the Highest Target Orientation Level. The post-hoc Newman-Keuls test shows a significant difference at the $p<.01$ level between the party topic 2 and the other two topics, but no significant difference between topics 1 and 3. See Table 4 above.

As with the Highest Target Orientation Level measure, there is a significant Pearson correlation between the number of words and the Variety of Levels students produce (r = .57, p<.001). An ANOVA with the covariate of the total number of words shows that sex no longer has a main effect, but grade level, topic, and mode of instruction still do. Eighth graders outperform fourth graders in Variety of Levels produced per 100 words ($F_{1,425}$ = 16.108, p<.001; M_8 = 4.03, M_4 = 3.69). Topic has a main effect at the p<.001 level ($F_{2,425}$ = 8.068; M_1 = 3.81, M_2 = 4.05, M_3 = 3.69). The main effect for mode of instruction is at the p<.003 level ($F_{2,425}$ = 5.755; M_{rp} = 4.02, M_{di} = 3.77, M_{ni} = 3.74). The Newman-Keuls test shows that role playing is significantly more effective (p<.01) than either direct instruction or no instruction, but there is no significant difference between direct instruction and no instruction. The performance on the party topic 2, when corrected for length, is still significantly better than on either of the other two topics (p<.01, Newman-Keuls), but there is no significant difference between the performance on the choosing subjects topic 1 and the cafeteria topic 2. The Newman-Keuls test shows the same pattern of differences and levels of significance between instructional conditions and between topics as when the covariate of length is not included.

There is an interaction between mode of instruction and topic at the $p<.002$ probability level ($F_{4,426} = 4.201$) for the Variety of Levels. There is also a significant interaction between grade level and mode of instruction ($p<.036$, $F_{2,426} = 3.359$). See the means and standard deviations on Tables 1 and 2 above.

I did an ANOVA for each of the topics. As on the other two measures, it is only on topic 1 that students score lower in the direct-instruction condition than in the no-instruction, but the difference is not significant on the Variety of Levels measure. For topic 2, an ANOVA shows a significant effect for instruction at the $p<.038$ level ($F_{2,151} = 3.336$). For topic 3, ANOVA significance is at the the $p<.001$ level ($F_{2,151} = 9.635$). The Newman-Keuls test shows a significant difference between role playing and no instruction on both topics 2 and 3 (at the $p<.05$ level for topic 2 and at the $p<.01$ level for topic 3. On topic 3, there is also a significant difference (at the $p<.01$ level) between role playing and direct instruction. There is no significant difference between direct instruction and no instruction on topics 2 or 3. See Table 3 above.

An ANOVA for each of the modes of instruction shows significant differences on Variety of Levels between the three topics, at the $p<.001$ level ($F_{2,151} = 7.556$) in the no-instruction condition, and at the $p<.009$ level ($F_{2,151} = 4.805$) after direct instruction; but there are no significant

differences between the topics in the role playing condition. The Newman-Keuls test shows that in both the direct-instruction and no-instruction conditions, students produce a significantly greater Variety of Levels on topic 2 than on either of the other topics. In the direct instruction condition, the level of significance is at $p<.01$ between topics 2 and 3 and at $p<.05$ between topics 2 and 1. In the no-instruction condition, the significance level is $p<.01$ between topics 2 and 3. There is also a significant difference in performance at the $p<.01$ level between topics 1 and 3. See Table 4 above.

To test the effect of grade level on mode of instruction, I did an analysis of variance at each grade level. At eighth grade, an ANOVA shows mode of instruction is not significant ($p<.182$); at fourth grade, it shows instruction is significant ($p<.001$, $F_{2,249} = 10.374$). Post-hoc comparisons show fourth graders writing significantly better letters ($p<.01$, Newman-Keuls) in the role-playing condition than in the other two conditions, but there is no significant difference between the other two conditions. See Table 5 and Figure 2 above.

An ANOVA for each instructional condition shows grade level differences are significant at the $p<.001$ level for all three conditions: no instruction, $F_{1,152} = 29.705$; direct instruction, $F_{1,152} = 53.557$; role playing, $F_{1,152} = 14.200$.

An ANOVA at eighth grade shows no significant sex differences on Variety of Levels although girls score higher than boys ($\underline{M}_g$ = 4.40, $\underline{M}_b$ = 4.20). However, an ANOVA at grade four shows girls significantly higher than boys on the Variety of Levels measure ($\underline{p}<.001$, $\underline{F}_{1,250}$ = 11.566; $\underline{M}_g$ = 3.67, $\underline{M}_b$ = 3.26). As on the Highest Target Orientation measure, the sex difference is greater at fourth grade.

When the ANOVA is corrected for length, the interactions between grade level and mode of instruction and between mode of instruction and topic are no longer significant. However, there is a new interaction between sex and instruction ($\underline{p}<.048$, $\underline{F}_{2,425}$ = 3.056. When divided into three groups according to the number of words produced, girls who produce the fewest words (34-116) benefit the most by role playing, but the difference in performance between role playing and the other two instructional conditions is significant on the post-hoc test for each of the three groups of girls. All three groups of boys do significantly better ($\underline{p}<.01$, Newman-Keuls) in the role playing than in the no-instruction condition, but boys in the group who produce the medium number of words (117-188) present an anomaly. They do significantly <u>better</u> ($\underline{p}<.01$, Newman-Keuls) in the direct instruction condition than in either of the other two. By contrast the boys with the fewest words do significantly worse in the direct-instruction condition than in the role-playing one.

Number of Persuasive Assertions

An ANOVA shows significant main effects on the Number of Persuasive Assertions measure between eighth and fourth graders, between the sexes, between the topics, and between the modes of instruction. Eighth graders outperform fourth graders ($F_{1,426}$ = 107.494, $p<.001$). The eighth graders produce half again as many Persuasive Assertions as the fourth graders (M_8 = 14.99, M_4 = 9.95). Girls outproduce boys (M_g = 13.37, M_b = 11.09; $F_{1,426}$ = 22.086, $p<.001$). Topic has a main effect ($F_{2,426}$ = 4.421, $p<.013$), with students at both grade levels combined doing best on the party topic 2 (M_2 = 13.19), second best on the cafeteria change topic 3 (M_3 = 11.94), and third on choosing their own subjects topic 1 (M_1 = 11.60). This order of performance on the topics (2, 3, and 1) is slightly different than the order for the Highest Target Orientation Level and Variety of Levels measures, which is 2, 1, and 3. Thus, although students wrote more Persuasive Assertions for the cafeteria change topic 3, the Level and Variety of Levels of Target Orientation is not as high as for choosing subjects topic 1. On all three dependent measures, students perform best on the party topic 2. The Newman-Keuls test for the differences between each of the topics shows students produced significantly more ($p<.05$ level) Persuasive Assertions on topic 2 than on either of the other two topics. See Table 8 below.

Instruction has a main effect at the $p<.016$ level ($F_{2,426} = 4.183$), with role playing exerting the greatest effect ($M_{rp} = 13.17$), direct instruction next ($M_{di} = 11.99$), and no instruction, third ($M_{ni} = 11.56$), as predicted. There is a significant difference between role-playing and each of the other two instructional conditions ($p<.01$, Newman-Keuls). See Table 8 below.

Because there is a highly significant correlation, as we might expect, between the number of words in each letter and the Number of Persuasive Assertions ($r = .86$, $p<.001$), I did another ANOVA corrected for length. This time the only significant main effect is for topic ($F_{2,425} = 8.175$, $p,>001$; $M_1 = 11.53$, $M_2 = 12.88$, $M_3 = 12.32$). The Newman-Keuls test shows the difference between cafeteria topic 3 and choosing subjects topic 1 to be significant at the $p<.05$ level, and the difference between topic 1 and party topic 2 to be significant at the $p<.01$ level. There is no significant difference between performance on topics 2 and 3.

There are two significant two-way interactions for the Number of Persuasive Assertions: between mode of instruction and topic ($p<.001$, $F_{1, 426} = 7.040$); and between sex and grade level ($p<.008$, $F_{1,426} = 7.078$). For the first interaction, see Table 6 and Figure 3 below.

Table 6
Interaction between Mode of Instruction and Topic for Number of Persuasive Assertions Means and Standard Deviations

		No Instruction	Direct Instruction	Role Playing	MAIN EFFECT TOPIC
N	Topic				
154	M 1	13.39	9.59	11.52	11.60
	(SD)	(6.43)	(5.59)	(5.55)	(6.04)
154	M 2	11.78	13.76	14.18	13.19
	(SD)	(5.88)	(6.50)	(5.72)	(6.13)
154	M 3	9.16	12.28	13.96	11.94
	(SD)	(4.26)	(5.91)	(6.33)	(5.87)
MAIN EFFECT INSTRUCTION	M	11.56	11.99	13.17	
	(SD)	(5.88)	(6.23)	(5.97)	

Note. Standard deviations are in parentheses.

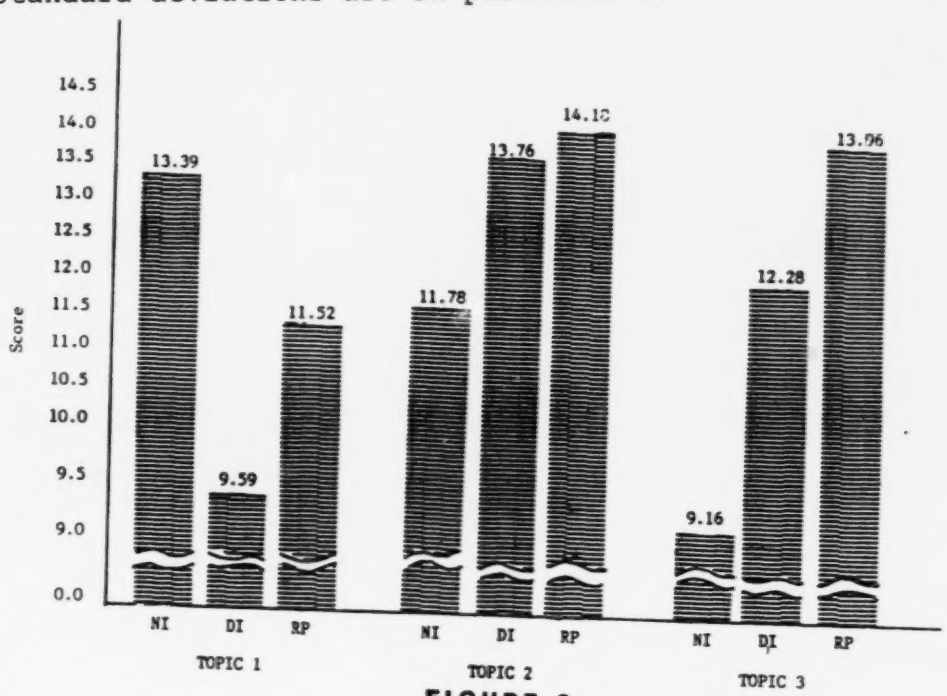

FIGURE 3

EFFECT OF MODE OF INSTRUCTION FOR EACH TOPIC ON NUMBER OF PERSUASIVE ASSERTIONS

Note. NI = No Instruction DI = Direct Instruction RP = Role Playing

An ANOVA for each of the three topics shows: For the party topic 2, there is no significant difference between modes of instruction. For choosing subjects topic 1, there is significance at the $p<.007$ level ($F_{2,151} = 5.190$), and for the cafeteria topic 3, at the $p<.001$ level, ($F_{2,151} = 9.085$). See Table 7 below. On topic 3, significance appears at the $p<.01$ (Newman-Keuls) level on all three dependent measures. It is unexpected and puzzling to find that for topic 1, the advisability of the students' choosing their own school subjects, the greatest Number of Persuasive Assertions occurs in the no-instruction condition, the next in the role-playing, and the fewest in the direct-instruction condition. Furthermore, performance with no instruction is significantly better than with direct instruction ($p<.01$, Newman-Keuls). This anomolous pattern for topic 1 showing worse performance after direct instruction than with no instruction reflects the pattern shown on the first two dependent measures, although on those measures an ANOVA shows no significance between groups. See Table 6 and Figure 3 above and Table 7 below. On topics 2 and 3, the pattern I hypothesized is reflected as it is on the three dependent measures: the most Persuasive Assertions are in the role-playing condition, the second most in the direct-instruction condition, and the fewest in the no-instruction condition. The interpretation of the differences on all three topics between performance in the no-instruction condition and in the other two conditions is

confounded by the fact that on topic 1 students produce more Persuasive Assertions in the no-instruction than in the other two conditions, and on the other two topics they produce the fewest in the no-instruction condition.

Table 7
Pair Comparisons: Mode of Instruction by Topic for Number of Persuasive Assertions

Role Playing/ No Instruction RP - ni = Diff.	Role Playing/ Direct Instruction RP - DI = Diff.	Direct Instruction/ No Instruction DI - ni = Diff.
Topic		
1 11.52-13.39=-1.87	11.52- 9.59= 1.93	9.59-13.39 =-3.80**
3 13.96- 9.16= 4.80**	13.96-12.28= 1.68	12.28- 9.16 = 3.12**
Diff.		
ON ALL 3		
TOPICS 13.17 -11.56=-1.61**	13.17 -11.99= 1.18**	11.99 -11.56 = .43

Note. N for each topic in each mode of instruction = 154.

** p<.01 (Newman-Keuls)

To test the effect of the mode of instruction on topic, I did ANOVAS, which show topic effects in all three instructional conditions: at the p<.001 level ($F_{2,151} = 6.978$) with no instruction; at the p<.003 level ($F_{2,151} = 6.031$) after direct instruction; and at the p<.041 level ($F_{2,151} = 3.267$) after role playing. On the Newman-Keuls test, after role playing, the difference between the Number of Persuasive Assertions students produce on topics 1 and 3 is at the p<.01 level. After direct instruction, the difference between topic 1 and the other two topics is significant (at the p<.01 level compared with topic 2

and at the $p<.05$ level compared with topic 3). In the no-instruction condition, there is a significant difference between topics 1 and 3 ($p<.01$) and between topics 2 and 3 ($p<.05$), as shown on Table 8 below. The pattern here is similar to the effect on the Highest Target Orientation Level and Variety of Levels measures: in the no-instruction condition, performance on topics 1 and 2 is the most similar.

An ANOVA for fourth grade shows significance for sex at the $p<.01$ level ($F_{1,250} = 30.520$), but an ANOVA at eighth grade shows no significance. ANOVAS show significance between eighth and fourth grades for both sexes: for boys, $p<.001$ ($F_{1,229} = 94.618$; for girls, $p<.001$ ($F_{1,229} = 24.732$.

Table 8
Pair Comparisons: Topic by Mode of Instruction for Number of Persuasive Assertions

Topic	2 - 1 = Diff.	2 - 3 = Diff.	1 - 3 = Diff.
RP	14.18 -11.52 =2.66	14.18 -13.96 =.22	11.52 -13.96 = -2.44*
DI	13.76 - 9.59 =4.17**	13.76 -12.28 =1.48	9.59 -12.28 = -2.69*
ni	11.78 -13.39 =-1.61	11.78 -9.16 =2.62*	13.39 - 9.16 = 4.23**
3 INSTR. MODES	13.19-11.60 = 1.59*	13.19-11.94 =1.25*	11.60 -11.94 = -.34

Note. N for each topic in each mode of instruction = 154.

* $p<.05$ (Newman-Keuls)
** $p<.01$ (Newman-Keuls)

When corrected for length, the interaction that is still significant on an ANOVA is between instructional condition and topic ($p<.004$, $F_{4,425} = 3.930$). This interaction makes it impossible to interpret the main effects as supporting the hypothesis that instruction accounts for difference in performance.

A Pearson's correlation of the means of the scores on the three dependent variables shows that Highest Target Orientation Level and Variety of Levels correlate well with one another ($r = .89$, $p<.001$). With Number of Persuasive Assertions, Variety of Levels correlates better ($r = .62$, $p<.001$) than Highest Level does ($r = .50$, $p<.001$).

Summary of Findings

As shown, the main effects, interactions, and post-hoc tests on

both the Highest Target Orientation Level and the Variety of Levels measure show that fourth and eighth graders who role play produce persuasive letters that are more oriented toward their target than students who have had a lecture and examples or than those with no instruction. However, there is no evidence to confirm that fourth graders who have a lecture and examples produce better persuasive letters than those with no instruction. After a lecture, instead of writing better than in the no-instruction condition, the total group of subjects actually write slightly worse than those with no instruction at all as measured by the Highest Target Orientation Level; on the Variety of Levels and Persuasive Assertions measures, the performance after a lecture is better but not significantly better than with no instruction. The main effect of instruction is largely due to the performance of the fourth graders who are more affected by role playing; at eighth grade the difference between role playing and direct instruction is not quite significant, but on the Highest Level measure there is a significant difference between role playing and no instruction. Interpretation of the effect of instruction is confounded by the fact that students write better on topic 1 with no instruction than with direct instruction as measured by all three variables. However, the interaction between instruction and topic is not significant on the first two measures when the effect of length is removed. Interaction effects between topic and instruction,

even when the ANOVA is corrected for length, limit the interpretation of the findings on the Persuasive Assertions measure.

On all three measures, eighth graders significantly outperform fourth graders, but on the Persuasive Assertions measure this significance is accounted for by length. Girls outperform boys on all three measures, but when an ANOVA includes the covariate of length, sex differences are no longer significant on any of the measures.

Topic has a significant main effect on all three measures, both with and without including the factor of length. Students write their best persuasion on party topic 2, second best on choosing subjects topic 1, and last on changes in the cafeteria topic 3, as measured by the Highest Target Orientation Level and the Variety of Levels. On the Number of Persuasive Assertions measure, again it is the party topic 2 that elicits the greatest number; but the cafeteria topic 3 next, and the choosing subjects topic 1 third.

When corrected for length, there are no significant interactions on Highest Target Orientation measure; on Variety of Levels, there is an interaction between sex and instruction; and on Persuasive Assertions, an interaction between instruction and topic.

EXPLANATION OF TOPIC EFFECTS

The one topic on which students at both levels perform best in terms on the two Target Orientation measures, is the assignment to persuade the principal to have a school-sponsored party. Could it be that the students felt this was a request that the principal would have many good reasons for denying and thus they would have to come up with unusually good arguments to make a case for it? Or might this have been a request they really would have liked to have had granted?

Performance after direct instruction on this party topic is significantly better than on either of the other two topics as measured by each of the dependent variables. The example I used in my lecture, a model persuasive letter arguing for a student lounge where students their age could socialize, might have given them some material for building their own case for a party. This party topic is also the one for which there is the greatest contrast between the Number of Persuasive Assertions produced by the girls and the boys at fourth grade. Although girls at both grade levels produce more Persuasive Assertions than boys on all topics, could the greater sex difference on this topic be attributed to a greater interest in a school-sponsored party by the fourth-grade girls?

How can we explain the poorest performance on the change in the cafeteria? One possibility is that writers did not have

spelled out in the assignment a single request they were to support, in contrast to the direction to argue for choosing their own subjects or for a party. When asked to present a case for something they wanted changed in the cafeteria, they seem to have come up with a string of complaints and requests rather than focusing on a set of considered reasons for a single, clear request, as for the other two topics. Or they may have had a more difficult time imagining how a change in the cafeteria would benefit the principal. A third reason is that students might have felt the principal would be more likely to comply with this request than student choice of subjects or a school-sponsored party, so they saw no need to come up with as many or as good reasons. If so, they felt more like Clark and Delia (1976) posited their subjects felt: They suggested that children produce fewer arguments for an intimate target than for a stranger because they feel their request will be granted anyway. A fourth explanation is that the students were tired of writing persuasive letters to the principal by the time this topic was introduced, since it was presented last to all six of the classes.

The topic requesting that students be allowed to choose their own school subjects is the one that is the least sensitive to instruction, as tested by the the two Target Orientation measures. The Number of Persuasive Assertions, however, there is significance, but the pattern is not as I predicted. The most Assertions are in the no-instruction condition and the

second-greatest number in the role playing condition. How can we explain this? Perhaps there is a problem with the control (no-instruction) condition, in which students were directed to argue either for or against having students choose their own subjects. In the other two conditions on the choosing subjects topic, I specified which side to choose: they were to argue for student choice. By contrast, in the wording of the other two topics, the side the students were to argue was specified in the written assignment. It was in a discussion with the students who were role playing the first (choosing subjects) topic that the idea of stipulating the side of the argument arose. Students suggested it would be difficult to imagine that the principal would be for student choice of subjects and that the student would object. I agreed, and so in the writing that followed both the role playing and the lecture I told the students to argue for student choice. This may have put some of them in the position of arguing against what they really believed. From the discussion at fourth grade, I could tell that a great many of the children felt they were still too inexperienced to choose their own subjects. At the eighth grade, students already had some elective subjects, so arguing for more choice may not have represented their true desire. This could explain why the average score on the Variety of Levels and Persuasive Assertions measures are higher in the no-instruction condition than in either of the other two.

COMPARISON WITH OTHER STUDIES

My findings are consistent with those of Florio's (1978) and Wagner's (1985) ethnographic studies; role playing and writing are closely associated. In a classroom where students are encouraged to assume roles, writing in role arises spontaneously.

My findings confirm those of Troyka (1973) that role playing improves persuasive writing.

My findings do not confirm the studies of Burns and Brainerd (1979), Dunn (1977), Galda (1984). Rosen (1974), Smilansky (1968), Somers (1972), Wright (1974), and Youngers (1977) that the language of boys more than girls is affected by dramatic activities. Although the differences are not significant, in this study it is girls whose writing seems to improve more after role playing. I found no interaction between sex and instructional condition on any of the four dependent variables until I corrected for number of words, at which point there is an interaction affecting the Variety of Levels measure. Girls who produce the most words show the greatest Variety of Levels in role playing whereas boys who produce an average number of words are significantly more affected by the lecture than by role playing.

The findings of this study are consistent with reading

research that shows the benefits of interactive learning rather than didactic "information giving" (Palincsar & Brown, 1984; Rogoff & Gardner, 1984; Harris & Cooper, 1985, p.136). Role playing in my study is a type of peer tutoring through which students may develop their own cognitive strategies for developing persuasion.

EDUCATIONAL IMPLICATIONS

The most obvious implication for teaching is that role playing in partners, for fourth graders, is a significantly more effective heuristic for developing audience-adapted persuasive letters than the presentation of information with an analysis of models and showing a set of rules; for eighth graders, role playing approaches significance in its effectiveness over the direct instruction. The time-honored typical teacher instruction, the method reflected in the current traditional paradigm (Berlin & Inkster, 1980), is only slightly more effective than no instruction even for eighth graders.

When children role play in partners, taking turns as a persuader and then as an intransigent target, they are on familiar social ground. They probably feel freer to experiment with persuasive strategies when facing only one other person, especially a same-sex peer, in a natural conversational situation, than when writing on their own. As children imagine their way into the stance of a persuader in role playing, they

are more likely to tap into what they have learned in real-world contexts. The emotional overtone that accompanies a social act may facilitate the transfer of natural competence to the classroom. Moreover, the act of playing the role of the target may help a student intuit that person's reasons for denying a request, and thus to write persuasion reflecting more sensitively another's perspective. The findings of this study show children have rudimentary schemata for persuasion and an unconscious audience sense (Polyani & Prosch, 1975) by the time they reach fourth grade. Role playing helps children tap into this resource and adapt their discourse to it.

It is interesting that the significant differences I found between topics on the first two dependent measures appear only in the no-instruction and lecture conditions but not in the role-playing condition. It is as if the students are able to perform nearer the level of their competence with no instruction or with the lecture if the topic is of sufficient interest or is one for which they have sufficient prior knowledge, but they need role playing for the topics that pose a greater challenge. Role playing may put them in touch with the persuasive competence they already can demonstrate on easier topics.

PERSUASION IN SCHOOL

One of the problems students may have faced with the assignments I gave was sorting out the real from the pretense. I told the

students that the principal was really going to read their letters, and in so doing I set up a situation they could perceive to be real-world persuasion. But when I told them that I had told the principal that I had given them this assignment, they knew that the principal would know that their letter was in some sense "phony." One eighth grader met with me outside of class to discuss a real persuasive challenge he faced. He wanted to take what he had learned about writing persuasion and apply it to a letter he wanted to write the principal about a teacher who was being mean and unfair to the students. I ended up advising him to talk with the principal instead since some particulars are best not committed to writing. Thus, even when a student has a genuine reason for writing a persuasive letter to a principal, the nuances of the power relationship make the task unusually challenging.

In a pilot study, eighth graders who had just finished reading Huckleberry Finn took the role of Huck and argued for freeing the slave Jim. Their target was a woman dressed as Miss Watson, an unyielding and determined slave owner. The persuasion they developed in the role playing in this totally simulated scene seemed to be less fraught with ambiguity than the role playing they did for a scene closer to home, namely, a dialogue with the principal. Perhaps both oral and written persuasion in role as a character far removed from the time and place of the actual school setting is easier for students because they are not

caught in the confusion of whether they are engaging in an imaginary or potentially real-world encounter in the peculiar power relationship of student and principal. Thus, at least for fourth and eighth graders, the principal may not be an appropriate target for persuasive letters.

CONCLUSION

Some of the best letters, in terms of target orientation, convey the sense that the student was writing from conviction, presenting a case in an authentic voice, implying a belief that this was a situation in which the student had a genuine stake in the outcome. One fourth grader's letter is tangential to the topic of choosing school subjects but written with the passion of a person pleading a case; he wants an after-school tackle football team. Another argues eloquently (in the no instruction condition) for having the principal decide on school subjects because the writer thinks most children would choose gym and art, and how could a bunch of athletes and artists ever run a society?

To quote one eighth grader's opening line, "School is an important and long part of a student's life." How can teachers make this long and important time meaningful and at the same time expect students repeatedly to write persuasion that is not part of a genuine interaction? In order to succeed as a writer in school a student "must learn to maintain certain pretenses --

chiefly that topics are self-initiated when in reality they are teacher-imposed, and that one´s audience is an undifferentiated adult public when in reality it is just one´s teacher or, at best, one´s teacher and a few classmates," as Mellon (1978) reminds us (p.262). Writing in school is, in part, a game of pretend. It is inauthentic writing. For most of us, school is where writing is primarily learned. Perhaps it will help if students see that persuasive writing in the classroom is in a sense playing a role, and that success is dependent in part on the same phenomenon on which success in the theater is based, namely at making the present setting disappear.

School is a place in which the young of society are socialized for the "necessary impersonal life", as Auden put it. Perhaps we should admit to students that part of the school writing-of-persuasion game is playing a role, laying aside personal convictions at times in order to try on the convictions of others; the goal is greater sensitivity to and understanding of the world outside oneself, not just in our day, but also in times past. Learning to play a role in the classroom, whether it be in oral role playing or in persuasive writing, can be effective in eliciting language that is appropriate for a wide variety of real-world occasions. It is a way to help students demonstrate their competence without implying to them or us that an assignment, especially when it is administered as a writing test, is an authentic persuasion event.

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